

The structure of dusty debris disks

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Minor bodies similar to asteroids and comets are ubiquitous components of planetary systems, typically found in belts analogous to the Asteroid and Kuiper belt in the Solar System. Although we cannot detect these bodies individually, mutual collisions between km-sized planetesimals produce high dust levels that are readily detectable in cold belts around 30% of nearby stars that we call debris discs. These belts provide unique and complementary constraints on the formation, architecture, and dynamics of planetary systems. In this talk I will review how over the last 5 years using ALMA observations we have been able to constrain the radial and vertical structure of exoKuiper belts, providing unique information about how planetesimals form and the dynamics in the outer regions of planetary systems. These efforts have opened a window into the outer regions of planetary systems that is complementary to exoplanet surveys and planet formation studies.